



ABSTRACT

Methods and processes for valuing a financial security, including mathematical and computational programming functions. A method and functions for portfolio aggregation. Processes computing change in price of a security or portfolio respective change in yield and time. A security composed of similar securities, engineered in manufacture process to reflect target criterion. Business logic of analytic valuation, security generation, and arbitrage differentials and relative value spreads, including engines of computerized automation and computer-based systems. A mutual fund. Numerical data cleaning and preparation, with related process. A process establishing likelihood of default of depository banks by operating ratios. Method and process for small sample data environments. Theta modeling technology, including process and mathematical programming functions. A modified OAS/martingale valuation lattice. A business process, reducing risk from deposit default and catastrophic loss. Improvements to the art, and unique functional specifications, of computational calculators.